

What is claimed is:

1. A method of communicating within a network interface apparatus, comprising:

creating special frames in a first part of the apparatus, the special frames including an identifier that distinguishes them from other frames passing through the apparatus;

sending the special frames from the first part to a second part of the apparatus through at least a media access controller of the device, the second part including a physical layer device;

identifying the special frames from among frames incoming to the second part, the identifying including examining the incoming frames for the presence of the identifier; and

extracting physical layer device control information from the special frames at the second part.

2. The method of claim 1, wherein the creating includes creating the special frames with the identifier in the position of a destination address, and wherein the identifying includes examining destination addresses of the incoming frames.

3. The method of claim 2, wherein the identifier is an otherwise unused IEEE address.

4. The method of claim 1, further comprising controlling the physical layer device using the control information.

5. The method of claim 1, wherein the extracting the control information includes changing the contents of memory registers of the second part.

6. The method of claim 1, wherein the first part includes an intermediate driver capable of creating the special frames.

7. The method of claim 1, wherein the sending the special frames includes passing the special frames through a device driver.

8. The method of claim 1, further comprising creating additional special frames in the second part, the additional special frames including an additional identifier, and passing the additional special frames to the first part.

9. The method of claim 8, wherein the identifier and the additional identifier are in the form of destination addresses.

10. The method of claim 8, wherein the identifier and the additional identifier are the same.

11. A network interface apparatus comprising:  
a network medium interface;  
a media access controller operatively coupled to the network medium interface; and  
a driver arrangement operatively coupled to the media access controller, the device driver arrangement including a device driver operatively configured to communicate with the media access controller, and an intermediate driver operatively configured to communicate control information to the network medium interface.

12. The apparatus of claim 11, wherein the network medium interface includes a second media access controller and a physical layer device.

13. The apparatus of claim 11, wherein the intermediate driver and the network medium interface are operatively configured to communicate via special frames.

14. The apparatus of claim 13, wherein the special frames are formatted to pass through the second media access controller as if the special frames were data frames.

15. The apparatus of claim 13, wherein the special frames each include an identifier.

16. The apparatus of claim 15, wherein the identifier is placed in each of the special frames in a position corresponding to a destination address in a data frame.

17. The apparatus of claim 16, wherein the identifier has the same format as the destination address.

18. The apparatus of claim 17, wherein the identifier is an otherwise unused IEEE address.

19. The apparatus of claim 11, wherein the intermediate driver is operatively between the device driver and the media access controller.

20. The apparatus of claim 11, wherein the device driver is operatively between the intermediate driver and the media access controller.

21. A network interface apparatus comprising:  
a network medium interface which includes a physical layer device;

a media access controller operatively coupled to the network medium interface;

a device driver operatively configured to communicate with the media access controller; and

means for controlling the physical layer device by passing control information through the media access controller.

22. The apparatus of claim 21, wherein the network medium interface includes a second media access controller operatively coupled to the physical layer device.

23. The apparatus of claim 21, wherein the means for controlling includes means for creating and sending special frames which include the control information.

24. The apparatus of claim 23, wherein the means for creating the special frames includes means for creating frames that are treated by the media access controller as data frames.

25. The apparatus of claim 23, wherein the network medium interface includes means for identifying the special frames.